

AMENDMENTS TO THE DRAWINGS

In accordance with 37 CFR 1.121(d), replacement drawing sheets are submitted herewith.

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## REMARKS

Claims 1-23 are pending in the application. In an Office Action mailed November 18, 2004, all claims were rejected under 35 U.S.C. § § 102 and 112. In addition, the specification was objected to as failing to comply with 37 CFR 1.75(d)(1) and MPEP § 608.01(o), and the drawings were objected to as failing to comply with 37 CFR 1.84(p)(4). Claims 1-3, 6, 7, 9, 11-13, 15-17, 19, 20, 22, and 23 have been amended.

### Objections to the Specification

The specification was objected to as failing to provide proper antecedent basis for the claimed subject matter, citing 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Specifically, the Office Action states that a "reciprocating assembly" (independent Claim 15) is not discussed in the specification. The Office Action further states: "[t]he term 'reciprocate' is defined as back and forth movement," and that "[t]he movement of the lift arm assemblies would be a lifting movement and not a reciprocating movement."

Applicants have amended the specification at page 5, line 8 to include the term "reciprocating assembly," by clarifying that attachment arm assemblies 26a and 26b are also known as reciprocating assemblies 26a and 26b. Applicants respectfully submit that no new matter has been entered with this amendment to the specification. The attachment arm assemblies 26a and 26b were defined in the specification at page 5, lines 9-11 as being "***able to reciprocate*** the lift platform 28 between a lowered position, an intermediate position, and a raised position...." (emphasis added). Even the Examiner has acknowledged that the attachment arm assemblies 26a and 26b are also known as reciprocating assemblies 26a and 26b (see Paragraph 7.b. of the final Office Action).

Applicants respectfully submit that although the term "reciprocate" may be defined in certain contexts as back and forth movement, a definition of the term "reciprocate" to mean

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movement "between a lowered position, an intermediate position, and a raised position" is not repugnant to this meaning of the term. As another example of a proper use of the term "reciprocate", see U.S. Patent No. 6,854,635, entitled "Vehicle Fold-Out Ramp", ("[A]s the ramp assembly 20 reciprocates between its deployed and stowed position, the moving floor 26 both rotates and translates into and out of flush position with the floor of the vehicle.").

Moreover, it is well established law that an inventor may be his or her own lexicographer by defining the specific terms used to describe the invention "with reasonable clarity, deliberateness, and precision." *See Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (quoting *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994)). Here, applicants clearly and deliberately described in the specification that the term "reciprocate" means moving the lift platform between a lowered position, an intermediate position, and a raised position.

#### Objections to the Drawings

The drawings were objected to as failing comply with 37 CFR 1.84(p)(4) because the same reference numbers are used for similar, but not identical elements within the different embodiment. In accordance with 37 CFR 1.121(d), replacement drawing sheets submitted herewith that address this objection. Applicants believe the replacement sheets obviate the objection set forth in the Office Action. In addition, number amendments to the specification have been included above that correspond to the numerical changes made to the drawings.

#### Claim Rejections Under 35 U.S.C. § 112

Claims 4, 6, 14, and 18 were rejected under 35 U.S.C. § 112, first paragraph, and Claims 1-23 were rejected under 35 U.S.C. § 112, second paragraph.

First, Claims 4, 6, 14, and 18 were rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement (i.e., containing subject matter that was not described in the specification in a way as to reasonably convey to one skilled in the art

that the inventors, at the time the application was filed, had possession of the claimed invention). Specifically, the Office Action states that Claims 4, 8, 14, and 18 are specific to the embodiment of FIGURE 6, and it is unclear as to how this embodiment protects the system from pin failures.

Applicants respectfully submit that Claims 4, 8, 14, and 18 are not solely directed to the embodiment of FIGURE 6. Rather, Claims 4, 14, and 18 read on all of the disclosed embodiments (FIGURES 1-7) because all of the disclosed embodiments may be located at one end of the first and second attachment arm assemblies. Claim 8, however, only reads on the two embodiments of FIGURES 4-7 because Claim 8 includes the claim limitation of Claim 7 wherein the support device comprises a U-shaped bracket.

Regarding the embodiment of FIGURES 6 and 7, applicants respectfully submit that the lift platform of the illustrated embodiment does not fail if one of the connection pins (242 and 244) fail. To illustrate how this embodiment protects the system from pin failures, applicants refer to page 8, line 26 to page 9, line 2 of the specification (including amendments to the specification, as noted above).

In the event of a pin breakage or displacement, the retaining plate 222 holds one of either the support arm 230a or balance arm 232a in place. The outer surface of the bushing housing 254a or 254b is trapped in place by the inner surface of shaft housing 226a or 226b, thereby constraining the system in the event of a pin failure. Thus, the contact between the inner surface of the shaft housing and the outer surface of the bushing housing are redundant to the function normally provided by the support arm pin 242 or balance arm pin 244.

Thus, applicants respectfully submit that Claims 4, 8, 14, and 18 all comply with the written description requirement of 35 U.S.C. § 112, first paragraph.

Second, Claims 1-23 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the applicants regard as the invention. Applicants note that Claims 1, 7, 9, 11, and 15 have been amended in response to the literal interpretations of the Office Action.

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a. The Office Action states that, in Claims 1, 11, and 15, the limitation "'the lift platform being held in a substantially horizontal first plane as the lift platform is moved between at least the raised and lowered positions' appears to be inaccurate. If the platform is being raised and lowered it cannot be held in a single horizontal plane." In response, applicants have amended Claims 1, 11, and 15 to recite "a substantially horizontal *position*", for which support is found at page 6, line 29 of the specification.

b. The Office Action states that, in Claims 1, 11, and 15, the limitation "'the support device supporting one of the first and second lift arm assemblies' does not appear to be accurate as the smaller link (20) does not 'support' the larger links (support arm 30a and the balance arm 32b)."

The term "support device", as described in the specification at page 7, lines 17-20 describes a device that acts as a "load transfer device, whereby in the event of a failure of one of the load bearing support arm pins, the load associated with the support arm [30a] is transferred to the balance arm [32b] by one or more of the support assemblies [20]." Therefore, applicants respectfully submit that use of the term "support device" in Claim 1, "support means" in Claim 11, and "support apparatus" in Claim 15 are accurate uses of these term.

c. The Office Action states that, in Claim 1, "the limitation 'the support device supporting one of the first and second attachment arm assemblies and maintaining the lift platform in a second [position] substantially parallel to the first [position] if at least a portion of [one] of the first and second attachment arm assemblies fails' appears to be inaccurate." The Office Action further states that "[t]he support device (20) prevents dropping movements of the lift platform upon failure of a pin in the *same* arm assembly (26a and 26b) as it maintains the integrity of the parallelogram arrangement for its own support arm assembly, not for the *other* arm assembly, see page 7, lines 5-20 of the specification."

Applicants respectfully disagree with the Examiner's statement that the cited claim language appears to be inaccurate. In the event of a failure of one of the load bearing support arm pins 42, the load associated with the support arm is transferred to the balance arm by one or more of the support assemblies. Thus, in this event, the support assembly 20 does act as a load transfer device in the *same* arm assembly (26a or 26b) (see page 7, lines 17-20). However, in the event of failure of the balance arm pin 44 connecting balance arm 32a to the lift platform, the *other* balance arm 32b maintains the level positioning of the lift platform 28 (see page 7, lines 9-12). Thus, in this event, the support assembly 20 maintains the platform in a second position substantially parallel to the first position.

d. The Office Action states that, in Claims 1 and 15, "the limitation 'maintaining the lift platform in a second plane substantially parallel to the first plane' is not true for all three of the disclosed embodiments. As the support devices (20 and 220) are redundant links of the parallelogram linkage of the attachment arm assembly they would prevent all dropping movements of the lift platform upon failure of a pin and the lift platform should be in substantially the same plane, not a second plane. Only the support device (120) is designed otherwise."

Applicants submit that the above rejection is no longer applicable, as Claims 1 and 15 have been amended to recite "maintaining the lift platform in a second *position* substantially parallel to the first *position*." Applicants further notes that the *same* positions are substantially parallel to one another.

e. The Office Action states that, "[i]t is unclear as to how Claim 3 can recite that the support device has a second bracket on the second arm assembly, as this would contradict the function recited in Claim 1 of 'maintaining the lift platform in a second plane substantially parallel to the first plane if at least a portion [of] the other of the first and second attachment arm

assemblies fails.' The device cannot be defined as being both brackets when its function is recited as supporting a portion of 'the other arm'. There is no 'other arm'."

Applicants submit that the above rejection is no longer applicable, as Claim 1 has been amended to recite "if at least a portion of *one* of the first and second attachment arm assemblies fails."

f. The Office Action states that, "Claim 7 is confusing as it can be interpreted in two completely different manners," as reciting a single bracket pinned to both attachment arm assemblies, or as a pair of brackets, one on each of the attachment arm assemblies. In response, Claim 7 has been amended to recite a pair of brackets, "first and second U-shaped brackets pinned to one of an upper arm or a lower arm of each of the first and second attachment arm assemblies."

g. The Office Action states that, "[i]t is unclear as to how Claim 7 can recite that the support devices comprises a U-shaped bracket pinned to each attachment arm assembly, as this contradicts Claim 1 which has it supporting one arm and maintaining the lift platform in position upon failure of the other arm."

Similar to section (e) above, applicants submit that the above rejection is no longer applicable, as Claim 1 has been amended to recite "if at least a portion of *one* of the first and second attachment arm assemblies fails."

h. The Office Action states that, in Claim 9, "the term 'upper and lower arms' lacks antecedent basis." Applicants have thus amended Claims 7 and 9 to include proper antecedent basis in Claim 9.

i. The Office Action states that, in Claim 15, "the use of the term 'reciprocating' is awkward and inaccurate." Applicants respectfully submit that use of the term "reciprocating" is not awkward or inaccurate, but rather is a common use of the term in the art. For a detailed

discussion of the term "reciprocate", see discussion above in the "Objections to the Specification" section.

j. The Office Action states that, in Claim 15, the term "reciprocating assembly" should be "said reciprocating assembly." Applicants have thus amended Claim 15 to include proper antecedent basis.

#### Claim Rejections Under 35 U.S.C. § 102

Claims 1-23 stand rejected under 35 U.S.C. § 102. First, Claims 1-3, 5, 11, 12, 15-17, 21, and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,732,960, issued to Nilson. Second, Claims 1-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,456,564, issued to Bianchini. Third, Claims 1, 2, 6, 11-16, 18, 19, and 21-23 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,364,597 B2, issued to Klinkenberg. Finally, Claims 1-19 and 21-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,958,793, issued to Garate.

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention. Because none of the cited references describes the invention as claimed, none of the references is anticipatory. This analysis focuses on the independent claims, Claims 1, 11, and 15.

Claim 1, as presently amended, teaches a wheelchair lift assembly, including first and second attachment arm assemblies extending between a reciprocating platform and a lift platform, and a support device coupled to one of the first and second attachment arm assemblies. The lift platform is movable between at least a raised position and a lowered position, and the lift platform is held in a substantially horizontal first position as it is moved between at least the raised and lowered positions. The support device supports one of the first and second attachment



arm assemblies and maintains the lift platform in a second position substantially parallel to the first position if at least a portion of one of the first and second attachment arm assemblies fails.

Claim 11, as presently amended, teaches a wheelchair lift assembly, including first and second attachment arm assemblies extending between a reciprocating platform and a lift platform, and support means extending between a portion of one of the first and second attachment arm assemblies. The lift platform is movable between at least a raised position and a lowered position, and the lift platform is held in a substantially horizontal position as it is moved between at least the raised and lowered positions. The support means is for supporting one of the first and second attachment arm assemblies and maintaining the lift platform in a position substantially parallel to the substantially horizontal position if at least a portion of one of the first and second attachment arm assemblies fails.

Claim 15, as presently amended, teaches a wheelchair lift assembly, including a lift platform, a reciprocating assembly extending between the lift platform and a reciprocating platform, and a support apparatus coupled to the reciprocating assembly. The reciprocating assembly is for reciprocating the lift platform between raised and lowered positions. The lift platform is held in a substantially horizontal first position as the reciprocating assembly reciprocates the lift platform between the raised and lowered positions. The support apparatus is for supporting the reciprocating assembly and maintaining the lift platform in a second position substantially parallel to the first position if at least a portion of the reciprocating assembly fails.

First, the Office Action sets forth the position that the Nilson reference discloses a substantially similar lift having upper and lower arms 24 and 29 and a support device 32. Applicants respectfully disagree.

The Nilson reference generally discloses a loading device for a vehicle that includes a pair of members 24 pivotally attached to a frame 20. Extending between the members 24 is a cross-member 32. Nilson expressly teaches that the cross-member 32

assist[s] in keeping the various elements 24 and 29, etc. in direct alignment as shown in Figure 6 and substantially at this point through the rigidifying [sic] affect of these members when the pivotal points are on dead center.

(Col. 2, lines 66-70). Thus, the Nilson reference expressly teaches that the cross-member 32 is for alignment and stiffening of various elements of the lift, ***not for maintaining the lift platform in a substantially horizontal position*** as recited in the claimed embodiments.

The Office Action states that "[t]he fact that Nilson refers to these redundant links as stiffening links does not detract from its showing of linkage with a geometry similar to the geometry of applicant's [sic] linkage, as to behave in the same manner." Applicants respectfully submit, however, that the Nilson cross member 32 does not teach or suggest applicants' "support device", "support means", or "support apparatus", as recited in the claimed embodiments. If one of the Nilson attachment pins 25 or 30 attaching the platform 26 to either one of the attachment arms 24 and 29 fails, the platform 26 will pivot about the other remaining attachment pin 25 or 30 and will no longer maintain its substantially horizontal position. As an example, if Nilson pin 25 fails, then the platform 26 will pivot about the attachment pin 30. Thus, there is no teaching or suggestion in the Nilson reference of a support device (Claim 1), support means (Claim 11), or a support apparatus (Claim 15), as recited in the claimed embodiments.

Second, the Office Action sets forth the position that the Bianchini reference discloses a substantially similar lift having upper and lower arms 50 and 60 and a support device 88. Applicants respectfully disagree.

The Bianchini reference generally discloses a winch-operated vehicle-mounted carrier 10 that includes a pair of upper arm 50 and pair of lower arms 60 pivotably attached at one end to

vertical support bars 16 of the upper rectangular section, and pivotably attached at the other end to a lower support bracket 68. The carrier includes two spring-loaded catches 88 attached to the vertical support bars 16. Bianchini expressly teaches in the specification, at Col. 5, lines 58-62 that the catches 88:

engage the outwardly extending tabs 56 of the upper arm 50 in a locked position when the electric winch 42 pulls the lower support bracket 68 to a position adjacent the upper rectangular section 12.

The Bianchini reference teaches that the catches 88 are attached to the vertical support bars 16, and attachable to the extending tabs 56 of the upper arms 50. Therefore, the Bianchini reference does not teach or suggest the "a support device coupled to one of the first and second attachment arm assemblies" (i.e., a support device coupled to both upper and lower arms of the attachment arm assemblies), as recited in Claim 1; "support means extending between a portion of one of the first and second attachment arm assemblies," as recited in Claim 11; or "a support apparatus coupled to the reciprocating assembly," as recited in Claim 15.

Moreover, the Bianchini reference expressly teaches that the catches 88 are for maintaining the lift in a locked, raised position, *not for maintaining the lift platform in a substantially horizontal position* as recited in the claimed embodiments.

Third, the Office Action sets forth the position that the Klinkenberg reference discloses a substantially similar lift having first and second attachment arm assemblies 21 and a support device (lock) 80. Applicants respectfully disagree.

The Klinkenberg reference generally describes a hydraulic lift 10 for a motor home having arms 21 coupled to a platform 44, which can be lowered to ground level by engaging an up/down switch 70. A locking mechanism 80 is pivotably engaged at one end of the upper shaft 26 of an arm 21, and has a jaw 84 which engages about a cooperating pin 86 on the

platform engaging bracket 30 (see FIGURE 5 and Claim 9). The locking mechanism 80 locks the platform in the elevated position, as described in the specification at Col. 3, lines 40-45:

One then again activates the switch 70, producing an upward pivoting of the arms 21, carrying the platform 44[] and item engaged thereon upwardly to a position which allows for engagement of a locking mechanism 80, used to lock the arms 21 in the elevated position, against any potential dropping thereof.

Thus, the Klinkenberg reference does not disclose "a support device coupled to one of the first and second attachment arm assemblies," as recited in Claim 1; "support means extending between a portion of one of the first and second attachment arm assemblies," as recited in Claim 11; or "a support apparatus coupled to the reciprocating assembly," as recited in Claim 15.

Moreover, the Klinkenberg reference expressly teaches that the locking mechanism 80 is for maintaining the lift in a locked, elevated position, *not for maintaining the lift platform in a substantially horizontal position* as recited in the claimed embodiments. Thus, there is no teaching or suggestion in the Klinkenberg reference of a support device (Claim 1), support means (Claim 11), or a support apparatus (Claim 15), as recited in the claimed embodiments.

Finally, the Office Action sets forth the position that the Garate reference discloses a substantially similar lift having first and second attachment arm assemblies 32 and 33 and a support device 120. Applicants respectfully disagree.

The Garate reference generally describes a jack for hoisting automotive transmissions, including a cradle carried upon a pair of arms 32 and 33 in turn mounted upon a shaft arrangement 148. A ratchet device 120 is connected to the shaft 148 to prevent counter rotation of the shaft 148. Thus, the Garate reference does not disclose "a support device coupled to one of the first and second attachment arm assemblies," as recited in Claim 1; "support means extending between a portion of one of the first and second attachment arm assemblies," as recited in Claim 11; or "a support apparatus coupled to the reciprocating assembly," as recited in Claim 15.

In view of the above remarks, applicants respectfully submit that the rejections of Claims 1-23 under 35 U.S.C. § 102 are all improper because all of the references fail to teach or suggest each and every element of the claimed embodiments. For example, all of the references fail to describe "a support device coupled to one of the first and second attachment arm assemblies," as recited in Claim 1; "support means extending between a portion of one of the first and second attachment arm assemblies," as recited in Claim 11; or "a support apparatus coupled to the reciprocating assembly," as recited in Claim 15. Accordingly, applicants respectfully request that the rejections under 35 U.S.C. § 102 be withdrawn.

Applicants further note that any hypothetical combination of the cited references also fails to teach or suggest all of the claim limitations as set forth in Claims 1, 11, and 15.

The Office Action cited U.S. Patent No. 5,527,146, issued to Allsop et al. as showing various embodiments of lighting platforms with locking brackets. Applicants disagree with any inference that Allsop et al. is relevant to the claimed embodiments.


#### CONCLUSION

In view of the foregoing remarks, applicants respectfully request reconsideration and allowance of all claims. Further, applicants respectfully submit that the dependent claims that depend from either Claim 1, 11, or 15 are thus allowable for the reasons discussed above. In addition, the dependent claims have further limitations that distinguish over the cited references of record, whether taken individually or in hypothetical combination. Therefore, applicants

respectfully submit that the dependent claims in the present application should also now be found allowable. The Examiner is invited to telephone the undersigned attorney if there are any remaining issues.

Respectfully submitted,

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